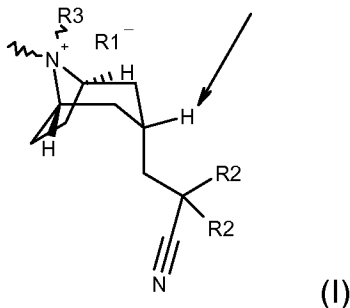


**In the Claims:**

This listing of claims replaces all prior versions of claims in the application:

1. (currently amended) A compound having structure I as indicated below:



wherein:

R1<sup>-</sup> represents an anion associated with the positive charge of the N atom; and

~~R2 is selected from the group consisting of straight or branched chain lower alkyl groups (having preferably from 1 to 6 carbon atoms), cycloalkyl groups (having from 5 to 6 carbon atoms), cycloalkyl-alkyl (having 6 to 10 carbon atoms), heterocycloalkyl (having 5 to 6 carbon atoms) and N or O as the heteroatom, heterocycloalkyl-alkyl (having 6 to 10 carbon atoms) and N or O as the heteroatom, aryl, optionally substituted aryl, heteroaryl, and optionally substituted heteroaryl~~ phenyl;

R3 is selected from the group consisting of (C<sub>2</sub>-C<sub>12</sub>)alkyl, (C<sub>4</sub>-C<sub>6</sub>)alkenyl, (C<sub>4</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, (C<sub>4</sub>-C<sub>6</sub>)alkyl-phenyl, (C<sub>4</sub>-C<sub>6</sub>)alkyl-OH, (C<sub>4</sub>-C<sub>6</sub>)alkyl-CN, (C<sub>4</sub>-C<sub>6</sub>)alkyl-halogen, (C<sub>4</sub>-C<sub>6</sub>)alkyl-CF<sub>3</sub>, (C<sub>4</sub>-C<sub>6</sub>)alkyl-OCH<sub>3</sub>, (C<sub>4</sub>-C<sub>6</sub>)alkyl-O-(C<sub>4</sub>-C<sub>6</sub>)alkyl-OCH<sub>3</sub> and (C<sub>4</sub>-C<sub>6</sub>)alkyl-O-(C<sub>4</sub>-C<sub>6</sub>)-aryl. Preferred R3 substituents are in the ~~endo position~~.

-(C<sub>2</sub>-C<sub>12</sub>)alkyl, -(C<sub>2</sub>-C<sub>6</sub>)alkenyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl(C<sub>3</sub>-C<sub>6</sub>)cycloalkyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-phenyl, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-OH, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-CN, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-halogen, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-

CF<sub>3</sub>, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-OCH<sub>3</sub>, -(C<sub>1</sub>-C<sub>6</sub>)alkyl-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl-OCH<sub>3</sub> and -(C<sub>1</sub>-C<sub>6</sub>)alkyl-O-(C<sub>1</sub>-C<sub>6</sub>)alkyl-aryl

2. (original) A compound according to claim 1 wherein the H atom indicated is in the exo position.

3. (original) A compound according to claim 1 wherein R<sup>1-</sup> is selected from the group consisting of chloride, bromide, iodide, sulfate, benzene sulfonate and toluene sulfonate.

4. (currently amended) A compound according claim 1 selected from the group consisting of:

3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(cyclohexylmethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(cyclopropylmethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-8-butyl-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-8-(4-chlorobutyl)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-dodecyl-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(2-propen-1-yl)-8-azoniabicyclo[3.2.1]octane iodide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(phenylmethyl)-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(2-hydroxyethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-ethyl-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;

(3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-propyl-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(5-hexen-1-yl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(4,4,4-trifluorobutyl)-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(3-phenylpropyl)-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(2-cyclohexylethyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-(3-cyanopropyl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-[2-(methyloxy)ethyl]-8-azoniabicyclo[3.2.1]octane bromide;  
 (3-*Endo*)-3-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(2-[(2-(methyloxy)ethyl)oxy]ethyl)-8-azoniabicyclo[3.2.1]octane bromide;  
 N-(*Endo*)-(3-*endo*)-3-(2-cyano-2,2-diphenylethyl)-(8-*endo*)-8-(5-hexen-1-yl)-8-methyl-8-azoniabicyclo[3.2.1]octane bromide;  
~~N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-(8-*endo*)-methyl-8-[2-[(phenylmethyl)oxy]ethyl]-8-azoniabicyclo[3.2.1]octane bromide;~~  
N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-(8-*endo*)-8-methyl-8-[2-[(phenylmethyl)oxy]ethyl]-8-azoniabicyclo[3.2.1]octane bromide; and  
 N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-8-methyl-8-(3-phenylpropyl)-8-azoniabicyclo[3.2.1] octane bromide ;~~and~~  
~~N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-(8-*endo*)-8-methyl-8-[3-[(phenyloxy]propyl]-8-azoniabicyclo[3.2.1]octane bromide.~~

5.(currently amended) A pharmaceutical composition ~~for the treatment of muscarinic acetylcholine receptor mediated diseases~~ comprising a compound according to any one of claims ~~claim~~ 1 to 4, and 14 to 37 and a pharmaceutically acceptable carrier thereof.

Claims 6 to 13 (cancelled)

14. (new) The compound according to claim 1 wherein R3 is  $-(C_2-C_{12})$ alkyl.

15. (new) The compound according to claim 14 wherein R3 is ethyl, propyl, butyl, or dodecyl.

16. (new) The compound according to claim 1 wherein R3 is  $-(C_2-C_6)$ alkenyl.

17. (new) The compound according to claim 16 wherein R3 is 2-propen-1-yl, or 5-hexen-1-yl.

18. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)$ alkyl-OH.

19. (new) The compound according to claim 18 wherein R3 is 2-hydroxyethyl.

20. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)$ alkyl-CN.

21. (new) The compound according to claim 20 wherein R3 is 3-cyanopropyl.

22. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)$ alkyl-halogen.

23. (new) The compound according to claim 22 wherein R3 is 4-chlorobutyl.

24. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)$ alkyl-CF<sub>3</sub>.

25. (new) The compound according to claim 24 wherein R3 is 4,4,4-trifluorobutyl.

26. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)$ alkyl-OCH<sub>3</sub>.

27. (new) The compound according to claim 26 wherein R3 is 2-(methyloxy)ethyl.

28. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)alkyl-O-(C_1-C_6)alkyl-OCH_3$ .
29. (new) The compound according to claim 28 wherein R3 is (2-[[2-methyloxy)ethyl]oxy]ethyl).
30. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)alkyl-O-(C_1-C_6)alkyl-aryl$ .
31. (new) The compound according to claim 31 wherein R3 is  $-(2-[(phenylmethyl)oxy]ethyl)$ .
32. (new) The compound according to claim 3 wherein R3 is  $-(C_1-C_6)alkyl-O-(C_1-C_6)alkyl-aryl$ .
33. (new) The compound according to claim 32 wherein R3 is  $-(2-[(phenylmethyl)oxy]ethyl)$ .
34. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)alkyl(C_3-C_6)cycloalkyl$ .
35. (new) The compound according to claim 34 wherein R3 is cyclohexylmethyl, cyclopropylmethyl, or cyclohexylethyl.
36. (new) The compound according to claim 1 wherein R3 is  $-(C_1-C_6)alkyl-phenyl$ .
37. (new) The compound according to claim 36 wherein R3 is benzyl, or phenylpropyl.
38. (new) The pharmaceutical composition according to claim 5 which is a dry powder composition for topical delivery to the lung by inhalation.
39. (new) The pharmaceutical composition according to claim 5 which is an aqueous solution or suspension composition for topical delivery to the lung by inhalation.

40. (new) The compound which is N-(*Endo*)-(3-*endo*)-(2-cyano-2,2-diphenylethyl)-(8-*endo*)-8-methyl-8-[3-[(phenyloxy)propyl]-8-azoniabicyclo[3.2.1]octane bromide.

41. (new) A pharmaceutical composition comprising a compound according to claim 40 and a pharmaceutically acceptable carrier or diluent.